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### REMARKS

This response is intended as a full and complete response to the final Office Action mailed February 7, 2007. In the Office Action, the Examiner notes that claims 1-25 are pending and rejected.

In view of the foregoing amendments and the following discussion, Applicant submits that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Thus, Applicant believes that all of the claims are now in allowable form.

It is to be understood that Applicant does not acquiesce to the Examiner's characterizations of the art of record or to Applicant's subject matter recited in the pending claims. Further, Applicant is not acquiescing to the Examiner's statements as to the applicability of the prior art of record to the pending claims by filing the instant response including amendments.

# 35 U.S.C. §103 Rejection of Claims 1-7

The Examiner has rejected claims 1-7 under 35 U.S.C. §103(a) as being unpatentable over Goldstein U.S. Patent 5,410,326 (hereinafter "Goldstein") in view of Seth-Smith et al. U.S. Patent 4,890,321 (hereinafter "Seth-Smith"). Applicant respectfully traverses the rejection.

#### Claim 1 recites:

A set top terminal for generating an interactive electronic program guide for display on a television connected thereto, the terminal comprising:

means for retrieving information about a subscriber;

means for receiving a television signal;

means for extracting individual programs from the television signal; means to demultiplex video, audio, graphics and text;

means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed;

means for generating an electronic program guide for controlling display of content on a television screen, the guide comprising a plurality of menus including:

a home menu;

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> a plurality of major menus displayed as menu options on the home menu:

a plurality of sub-menus displayed as menu options on the plurality of major menus; and

a plurality of during programming menus enacted after selection of a program,

wherein at least one of the plurality of menus comprises the demultiplexed video, graphics and text, and wherein at least one of the plurality of major menus comprises displaying a plurality of audio choices for accessing the audio; and

means for receiving the selection signals from a user input. (emphasis added).

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Goldstein and Seth-Smith references alone or in combination fail to teach or suggest Applicant's invention as a whole.

Specifically, Goldstein fails to teach or suggest at least "means to demultiplex video, audio, graphics and text", "means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed" and "wherein at least one of the plurality of major menus comprises displaying a plurality of audio choices for accessing the audio;" as recited in independent claim 1 as amended. For example, the Applicant's invention provides a means such that a subscriber may separately access digital radio channels while other programming is being viewed on the television. (See e.g., Applicant's specification, p. 36, Il. 1-6.)

Goldstein discloses a "universal remote control device which is programmed to operate a variety of consumer products" (Abstract). However, Goldstein does not teach or suggest a means to demultiplex video, audio, graphics and text. The Examiner generally cites FIG. 14 and column 16, line 38 - column 19, line 12 of Goldstein.

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However, nowhere in the cited passage does Goldstein teach a means to demultiplex video, audio, graphics and text. Notably, FIG. 14 of Goldstein fails to illustrate any device that could even perform the functions of a demultiplexer.

In the Final Office Action, the Examiner again reiterates his position by ambiguously referring to the above mentioned sections of Goldstein. (See Final Office Action, p. 19, § 6(a).) The Applicant respectfully requests the Examiner to specifically point out what modules as illustrated in FIG. 14 or what section in the above mentioned passages teach the alleged "demultiplexing of video, audio, graphics and text". The Applicant respectfully submits that they have carefully reviewed the citation provided by the Examiner and the citation does not support the Examiner's assertion. For Example, Goldstein at column 16, lines 38-45 generally discuss the overview of FIG. 14. Goldstein at column 16, lines 46-61 discusses the second tuner. Goldstein at column 16, lines 63-68 discusses a keyboard. Goldstein at column 17, lines 1-7 discusses the microprocessor unit 137. Goldstein at column 17, lines 8-12 discusses the glue logic. Goldstein at column 17, lines 13-19 discusses a sync separator to identify frames of video data being sent as text or graphic material. Goldstein at column 17, lines 20-22 discusses a channel modulator. Goldstein at column 17, lines 23-31 discusses a bidirectional communications link of the converter. Goldstein at column 17, lines 32-42 discusses data provided via a modem and an FM transmitter to provide radio frequency and carrier signal for broadcasting. Goldstein at column 17, lines 43-50 discusses the FM transmitter further. Goldstein at column 17, lines 51-57 discusses an IR blaster for driving an LED. Goldstein at column 17, lines 58-61 discusses an additional serial port. Goldstein at column 17, line 62 - column 18, line 3 discusses configuring the converter such that it may be initialized in the field from the head end cable facility. Goldstein at column 18, lines 4-9 discusses security provisions. Goldstein at column 18, lines 10-13 discusses sending the converter into the field with only a partial kernel operating system. Goldstein at column 18, lines 14-22 discusses downloading information to enable the remote control device from the head end. Goldstein at column 18, lines 23-31 discusses the security of the converter in further detail with reference to FIG. 15. Goldstein at column 18, lines 32-38 also discusses security features. Goldstein at column 18, lines 39-49 discusses initialization of the converter by reading information in Serial No. 09/964,891 Page 11 of 19

various memory. Goldstein at column 18, lines 50-61 discusses the tuning sequence for the second tuner. Goldstein at column 18, line 62 - column 19, line 3 discusses reception of identification data and identification of the converter. Goldstein at column 19, lines 4-12 discusses saving the identification in the memory such that when power is removed the search routine will not need to be repeated. The Applicant respectfully requests the Examiner to please specify where in each of the laid out paragraphs, Goldstein teaches demultiplexing of video, audio, graphics and text.

Moreover, Goldstein fails to teach or to suggest a means to separately access demultiplexed audio, or that at least one menu comprises displaying the audio choices for selection. However, the Examiner alleges that Seth-Smith bridges the substantial gap left by Goldstein and the Applicant's invention.

Seth-Smith fails to bridge the substantial gap between Goldstein and the Applicant's invention. Seth-Smith fails to teach or to suggest means to demultiplex video, audio, graphics and text. In particular, Seth-Smith discloses a teletext message is assembled with video and multi-channel audio before being transmitted to a subscriber. (See Seth-Smith, col. 6, II. 43-52, FIG. 1) Notably, the signal is never disassembled after transmission. In fact, Seth-Smith teaches that the format of the signal is a single frame. (See Id. at col. 7, II. 29-67, FIG. 2) Therefore, Seth-Smith teaches away from the Applicant's invention of means to demultiplex video, audio, graphics and <u>text</u>.

The Examiner asserts that Seth-Smith teaches a means to demultiplex video, audio, graphics and text in column 7, lines 30-68. The Applicant respectfully submits that the section of Seth-Smith cited by the Examiner only teaches inserting data into the vertical blanking intervals (VBI) or horizontal blanking intervals (HBI) of each frame. The Applicants respectfully submit that inserting and removing data from the VBI or HBI is not the same as a means to demultiplex video, audio, graphics and text.

Furthermore, Seth-Smith fails to teach or suggest means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed. Responsive to the Examiner's comment in the Final Office Action regarding the fact that the audio is

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independent and unrelated to the program, the Applicant amends the claim to further recite that the audio is independent from the television signal and the <u>audio is accessed simultaneously while the television signal is being displayed</u>. Seth-Smith is clearly silent with regard to the above amended limitation.

As such, claim 1 is patentable over Goldstein in view of Seth-Smith under 35 U.S.C. §103(a). Furthermore, claims 2-7 depend, directly or indirectly, from independent claim 1, while adding additional elements. Therefore, claims 2-7 are also patentable over Goldstein in view of Seth-Smith under §103 for at least the same reasons that claim 1 is patentable over Goldstein in view of Seth-Smith under §103.

Therefore, Applicant respectfully requests that the Examiner's rejection be withdrawn.

# 35 U.S.C. §103 Rejection of Claims 22 and 23

The Examiner has rejected claims 22 and 23 under 35 U.S.C. §103(a) as being unpatentable over Banker et al. (U.S. Patent 5,477,262, hereinafter "Banker") in view of Seth-Smith.

### Claim 22 recites:

22. A set top terminal for generating an interactive electronic program guide for display on a television connected to the set top terminal, the terminal comprising:

means for retrieving information about a subscriber;

means for receiving a television signal;

means for extracting individual programs from the television signal;

means to demultiplex video, audio, graphics and text;

means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed;

means for generating an electronic program guide for controlling display of content on a television screen, the guide comprising a plurality of menus including:

a plurality of interactive menus, each corresponding to a level of interactivity and having one or more interactive menu items for selection; and

a main menu having one or more main menu items for selection, which main menu items correspond to the interactive menus, wherein the menus are navigated using a user input, and wherein the Serial No. 09/964,891 Page 13 of 19

> main menu items and the interactive menu items are responsive to selection signals received from the user input.

wherein at least one of the plurality of menus comprises the demultiplexed video, graphics and text, and wherein at least one of the plurality of menus comprises displaying a plurality of audio choices for accessing the audio; and

means for receiving the selection signals from the user input. (emphasis added).

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). The Goldstein and Seth-Smith references alone or in combination fail to teach or suggest Applicant's invention as a whole.

Specifically, Banker fails to teach or suggest at least "means to demultiplex video, audio, graphics and text", "means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed" and "wherein at least one of the plurality of major menus comprises displaying a plurality of audio choices for accessing the audio;" as recited in independent claim 22 as amended. For example, the Applicant's invention provides a means such that a subscriber may separately access digital radio channels while other programming is being viewed on the television. (See e.g., Applicant's specification, p. 36, II. 1-6.)

Banker discloses an "[a]pparatus for providing a user friendly interface to a subscription television terminal comprises a key pad arranged into a plurality of key groupings and an on-screen display controller for generating a plurality of screens for display on an associated television receiver" (abstract). However, nowhere in the cited passage does Banker teach a means to demultiplex video, audio, graphics and text. Notably, Banker fails to illustrate any device that could even perform the functions of a demultiplexer.

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The Examiner alleges that module 304 shown in Banker teaches the means for to demultiplex video, audio, graphics and text. The Applicant respectfully submits that Banker clearly teaches that module 304 is a demodulating and descrambling circuitry. The Applicant respectfully submits that demodulating and demultiplexing are not equivalent.

Moreover, Banker fails to teach or to suggest a means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed, or that at least one menu comprises displaying the audio choices for selection. However, the Examiner alleges that Seth-Smith bridges the substantial gap left by Banker and the Applicant's invention.

Seth-Smith fails to bridge the substantial gap between Banker and the Applicant's invention. Seth-Smith fails to teach or to suggest means to demultiplex video, audio, graphics and text. In particular, Seth-Smith discloses a teletext message is assembled with video and multi-channel audio before being transmitted to a subscriber. (See Seth-Smith, col. 6, Il. 43-52, FIG. 1) Notably, the signal is never disassembled after transmission. In fact, Seth-Smith teaches that the format of the signal is a single frame. (See Id. at col. 7, II. 29-67, FIG. 2) Therefore, Seth-Smith teaches away from the Applicant's invention of means to demultiplex video, audio, graphics and text.

The Examiner asserts that Seth-Smith teaches a means to demultiplex video. audio, graphics and text in column 7, lines 30-68. The Applicant respectfully submits that the section of Seth-Smith cited by the Examiner only teaches inserting data into the vertical blanking intervals (VBI) or horizontal blanking intervals (HBI) of each frame. The Applicants respectfully submit that inserting and removing data from the VBI or HBI is not the same as a means to demultiplex video, audio, graphics and text.

Furthermore, Seth-Smith fails to teach or suggest means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed. Responsive to the Examiner's comment in the Final Office Action regarding the fact that the audio is

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independent and unrelated to the program, the Applicant amends the claim to further recite that the audio is independent from the television signal and the <u>audio is accessed simultaneously while the television signal is being displayed</u>. Seth-Smith is clearly silent with regard to the above amended limitation.

As such, claim 22 is patentable over Banker in view of Seth-Smith. Claim 23 recites relevant limitations similar to those recited in claim 22 and, accordingly, for at least the same reasons discussed above with respect to claim 22, claim 23 also is patentable over Banker in view of Seth-Smith.

Therefore, Applicant respectfully requests that the Examiner's rejection be withdrawn.

## 35 U.S.C. §103 Rejection of Claims 8-21

The Examiner has rejected claims 8-21 under 35 U.S.C. §103(a) as being unpatentable over Banker in view of Seth-Smith and U.S. Patent 5,539,871 to Gibson (hereinafter "Gibson"). Applicant respectfully traverses the rejection.

#### Claim 8 recites:

8. A set top terminal for generating an interactive electronic program guide for display on a television connected to the set top terminal, the terminal comprising:

means for receiving a television signal;

means for extracting individual programs from the television signal; means to demultiplex video, <u>audio</u>, graphics and text;

means to <u>separately access the audio while a program extract from</u> the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed;

means for generating an electronic program guide for controlling display of content on a television screen, the guide comprising:

a plurality of menus, wherein at least one of the menus comprises the demultiplexed video, graphics and text, and wherein at least one of the menus comprises <u>displaying a plurality of audio choices</u> for accessing the <u>audio</u>;

a logo that is displayed on the television screen during one of the programs, which program has one or more interactive features; and an overlay menu that is displayed during the one of the programs, the overlay menu including the interactive features; and means for receiving selection signals from a user input, wherein the logo indicates to a user that the interactive features are

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available for the program, and wherein the overlay menu is displayed in response to a signal received from the user input. (emphasis added).

Banker and Gibson, alone or in combination, fail to teach or suggest Applicant's invention as a whole. Specifically, Banker and Gibson fail to teach or suggest at least "means to demultiplex video, audio, graphics and text" and "means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed" and an electronic program guide comprising "a plurality of menus... wherein at least one of the plurality of menus comprises displaying a plurality of audio choices for accessing the audio" as recited in claim 8 as amended.

Banker discloses overlaying characters on a video pattern. However, Banker does not teach or suggest means to demultiplex video, audio, graphics and text, means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed, and that at least one menu comprises displaying the audio choices for selection, as discussed above.

Gibson discloses a "method and system in a data processing system for selectively associating stored data with an animated element within a multimedia presentation in a data processing system" (abstract). Gibson also does not teach or suggest means to demultiplex video, audio, graphics and text, separately access demultiplexed audio and that at least one menu comprises displaying the audio choices for selection

The Seth-Smith reference fails to bridge the substantial gap between Banker and Gibson and the Applicant's invention. Seth-Smith fails to teach or to suggest means to demultiplex video, audio, graphics and text. In particular, Seth-Smith discloses a teletext message is assembled with video and multi-channel audio before being transmitted to a subscriber. (See Seth-Smith, col. 6, II. 43-52, FIG. 1) Notably, the signal is never dis-assembled after transmission. In fact, Seth-Smith teaches that the format of the signal is a single frame. (See *Id.* at col. 7, II. 29-67, FIG. 2) Therefore,

Seth-Smith teaches away from the Applicant's invention of means to demultiplex video. audio, graphics and text.

The Examiner asserts that Seth-Smith teaches a means to demultiplex video. audio, graphics and text in column 7, lines 30-68. The Applicant respectfully submits that the section of Seth-Smith cited by the Examiner only teaches inserting data into the vertical blanking intervals (VBI) or horizontal blanking intervals (HBI) of each frame. The Applicants respectfully submit that inserting and removing data from the VBI or HBI is not the same as a means to demultiplex video, audio, graphics and text.

Furthermore, Seth-Smith fails to teach or suggest means to separately access the audio while a program extract from the television signal is being displayed, wherein the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed. Responsive to the Examiner's comment in the Final Office Action regarding the fact that the audio is independent and unrelated to the program, the Applicant amends the claim to further recite that the audio is independent from the television signal and the audio is accessed simultaneously while the television signal is being displayed. Seth-Smith is clearly silent with regard to the above amended limitation.

Thus, Banker, Seth-Smith and Gibson fail to teach or suggest the Applicant's claimed invention as a whole. As such, Applicant's independent claim 8 is patentable under 35 U.S.C. §103(a) over Banker in view of Seth-Smith and Gibson. Furthermore, claims 9-21 depend, directly or indirectly from independent claims 8 and 23, while adding additional elements. Therefore, claims 9-21 are also patentable over Banker in view of Seth-Smith and Gibson under 35 U.S.C. §103(a).

Therefore, Applicant respectfully requests that the Examiner's rejection of claims 8-21, 24 and 25 under 35 U.S.C. §103(a) be withdrawn.

### 35 U.S.C. §103 Rejection of Claims 24 and 25

The Examiner has rejected claims 24 and 25 under 35 U.S.C. §103(a) as being unpatentable over Banker and Seth-Smith, as applied to claim 23 above, and further in view of Gibson. Applicant respectfully traverses the rejection.

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Each of the grounds of rejection applies only to dependent claims, and each is predicated on the validity of the rejection under 35 U.S.C. §103 for the corresponding independent claims. Since the rejection of the corresponding independent claims under 35 U.S.C. §103 has been overcome, as described hereinabove, and there is no argument put forth by the Office that any other additional references supply that which is missing from Banker and Seth-Smith to render the independent claims unpatentable, these grounds of rejection cannot be maintained.

Therefore, Applicant respectfully requests that the Examiner's rejection of claims 2-6 under U.S.C. §103(a) be withdrawn.

## Official Notices

The Office Action takes numerous Official Notices. Applicant hereby traverses each Official Notice. The Examiner alleges that apparatus and/or methods taught by certain limitations are well known in the art. However, the Applicant believes that these apparatus and/or methods rejected by the Examiner using Official Notice may not be well know within the art of the present invention as recited in the pending claims. For example, the allegedly well known limitations may not be well known to be used in combination with other limitations of the claims in which they are found or in claims form which they depend.

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### CONCLUSION

Thus, Applicant submits that all of the claims presently in the application are allowable. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall or Jimmy Kim at (732) 530-9404, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

Dated: 4/9/07

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